BARRON COUNTY FOREST COMPREHENSIVE LAND USE PLAN TABLE OF CONTENTS

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600 PROTECTION

<u>Objective</u>: To protect and manage the resources of the forest from preventable losses resulting from fire, insects, diseases, and other destructive elements including those caused by people. Protective methods shall include proper silvicultural methods.

605 FIRE CONTROL

Damage to the forest caused by uncontrolled fire can create an important challenge in the management of the forest. Loss of resource values caused by fire will be minimized through organized prevention, detection and suppression methods. Maintaining a healthy forest is key to fire management. The DNR is responsible for all matters relating to the prevention, detection and suppression of forest fires outside the limits of incorporated villages and cities. (s.26.11(1), Wis.Stats). The DNR works cooperatively with local fire departments in all fire control efforts. The Barron County Forest is mostly part of the intensive Forest Fire protection area with several compartments having cooperative agreements with appropriate Fire Departments. The Fire Prevention Handbook No. 4310.5, Fire Presuppression Handbook No. 4320.5, the Fire Suppression Handbook No. 4342.05 and the Area Fire Plan shall serve as the guidelines for fire control activities.

605.1 COOPERATION WITH THE DEPARTMENT OF NATURAL RESOURCES

Pursuant to s. 26.11(4) and s. 28.11(4)(f), Wis. Stats., and of the Barron County Forest Ordinance, the County may cooperate with the DNR in the interest of fire prevention, detection and suppression on the County Forest. Barron County has no reciprocating agreements with the DNR.

605.1.1 Personnel

County Forest personnel, upon request from the DNR, shall be made available for forest fire control efforts within the county. Barron County has no memorandum of understanding (MOU) with the DNR.

605.1.2 Fire Detection

Fire detection is the responsibility of the DNR. County Forestry personnel shall assist and report any wild fires to the DNR, local Fire Department or 911 Dispatch as appropriate for Barron County.

605.1.3 Forest Fire Prevention

DNR fire control personnel are authorized by the County to place fire prevention signs at recreational areas and other strategic locations within the forest. The County conducts and controls all operations (including harvesting) on the forest in a manner designed to minimize forest fires. The use of the County Forest during high fire danger periods may be restricted. These restrictions will include, but not be limited to, recreation, motorized trails, and logging.

605.2 SLASH DISPOSAL

Timber sale contracts will be designed to meet or exceed the requirements of the Slash Disposal Law, s. 26.12, Wis. Stats. Additional requirements may be imposed as necessary.

605.3 DEBRIS BURNING

Unauthorized burning of debris will not be permitted on County Forest Lands pursuant to s. 26.12(5), Wis. Stats.

605.4 CAMP FIRES

During periods of high fire danger, use of camp fires may be restricted.

605.5 PRESCRIBED BURNING

All prescribed burning on County Forest lands will follow the DNR recommendations. See Manual Code 4361.1 and Prescribed Burn Handbook No. 4320.5 for details. Prescribed fire may be an effective management tool on the County Forest.

605.6 COUNTY FOREST FIRE HAZARD AREAS

Existing access roads and water access points will be maintained as deemed necessary. Secondary emphasis will be placed on hardwood areas with no firebreaks developed or maintained. However, access roads will be maintained as defined in Chapter 700 of this plan.

605.7 UNCONTROLLED FIRE

Any uncontrolled or non-prescribed fires on the County Forest will be suppressed as soon as possible.

610 CONTROL OF FOREST PEST & PATHOGEN

610.1 DETECTION

Damage to the forest caused by insects, other pests and diseases can adversely affect management of the forest resources. Losses to resource values impacted by forest pests will be minimized through integrated pest management methods, with emphasis on silvicultural prescriptions (timber sales). The detection and control of pest problems will be accomplished by county and DNR personnel in cooperation with other agencies.

610.2 PEST SURVEYS

Pest surveys are conducted under the direction of the DNR's regional entomologist. The County may cooperate by providing personnel and equipment to assist in these operations.

610.3 INTEGRATED PEST MANAGEMENT

Integrated pest management for the purpose of this Plan, is defined as follows:

"The maintenance of destructive agents, including insects, at tolerable levels, by the planned use of a variety of preventive, suppressive, or regulatory tactics and strategies that are ecologically and economically efficient and socially acceptable."

The integrated pest management control and methodology shall be determined jointly by the County Forest Administrator, and DNR Liaison Forester in consultation with the DNR regional entomologist and regional forester. Suppression of forest pests may include the following:

- 1) Silvicultural prescriptions, including timber sales.
- 2) Biological control.
- 3) Chemical control.

610.3.1 Specific Pests and Pathogens of Interest.

610.3.1.1 Gypsy Moth Strategy

This introduced pest has progressed westward from the northeastern United States since the early 1900's. It reached eastern Wisconsin and has been widespread in some counties since 1988. Despite efforts to slow-the-spread and suppress outbreaks, it is progressing westerly through Wisconsin. The Barron County Forest's strategy to combat this defoliating insect has focused on using silvicultural techniques to maintain and improve forest vigor, so as to decrease the likelihood and severity of defoliation. Biological controls may also be available for introduction to help reduce outbreak frequency. The Barron County Forest has no areas, where based on today's knowledge, suppression efforts would be worth while or attempted.

The presence or discovery of threatened or endangered species in these areas may impact both the type of treatment and the decision to apply suppression tactics. Current insecticides for gypsy moth control include a bacterial insecticide (Btk) and a commercial formulation of a naturally-occurring virus (Gypchek). The Gypchek virus, specific to gypsy moth larvae, is only available through the federal suppression program administered by the DNR. The intent in combating this insect is not to eradicate, but rather to reduce populations so that tree mortality is maintained at tolerable levels. The DNR's local gypsy moth coordinator and entomologist will be available for consultation on control tactics and possible quarantine procedures. DATCP is the agency responsible for quarantine procedures for wood products from infested counties.

If needed in the future, Barron County Forest's threshold levels for considering suppression will be as follows:

- 20 acres in size and of a compact and regular shape (minimum eligible size for aerial spraying through the state suppression program).
- 500 egg masses per acre based on 1/40th acre (18.6 ft. radius) plots Barron County has been aggressively managing our Oak stands and expects damage from this pest to be manageable and/or tolerable.

610.3.1.2 Oak Wilt

Oak wilt, *Ceratocystis fagacearum* (*Bretz*) *Hunt*, is a destructive disease of oak trees. It is responsible for the death of thousands of oak trees in forests, woodlots, and home landscapes each year. Oak wilt is caused by a fungus that invades and impairs the tree's water conducting system, resulting in branch wilting and tree death. Trees in both the red oak group and white oak group are affected. There is no known cure once a tree has oak wilt. Prevention of new oak wilt infection centers is the best management option and involves avoiding injury to healthy trees and removing dead or diseased trees. Healthy trees should not be pruned during the growing season as this attracts beetles that may carry the oak wilt fungus.

Barron County was Oak Wilt free until 2003. No contaminated sites are in the vicinity of the county forest. We do not expect our high quality Oak stands to be susceptible to Oak Wilt, but we will however continue to monitor the status of Oak stands within the Forest.

610.3.1.3 Forest Tent Caterpillar

Forest tent caterpillar, *Malacosoma disstria Hubner*, can be found throughout the United States and Canada wherever hardwoods grow. The favored hosts in Wisconsin are aspen

and oak. This native insect causes region-wide outbreaks at intervals from 10 to 15 years; outbreaks usually last 2-5 years in the Lake States. Severe and repeated defoliation can lead to dieback and/or reduced growth of affected trees, which in some instances may be significant. Populations are often controlled by natural enemies, helping the population crash. Aerial spraying of insecticides can be an option for control as well. It will be Barron County's strategy to employ sound silvicultural practices to combat this cyclic pest.

610.3.1.5 Two-lined Chestnut Borer

The two-lined chestnut borer, *Agrilus bilineatus* (*Weber*), is a common secondary pest in trees which have been severely defoliated several years in a row or after stresses such as timber harvest. Oaks that have been defoliated by insects such as gypsy moth (*Lymantria dispar*), fall *cankerworm* (*Alsophila pometaria*), and forest tent caterpillar (*Malacosoma disstria*) can be attacked and killed by the two-lined chestnut borer. In past years drought stressed trees have been found to be susceptible the two-lined Chestnut borer and have forced several salvage operations. Prevention of two-lined chestnut borer is the best management option Barron County will strive to maintain healthy trees through sound silvicultural practices to discourage infestation. Infestations will be salvaged promptly.

610.3.1.6 Emerald Ash Borer

The Emerald Ash Borer, *Agrilus planipennis (Weber)*, was introduced from Asia and has taken hold in lower Michigan with a foot hold in the Upper Peninsula of Michigan. In lower Michigan it has resulted in widespread mortality specific to Ash including green, white, black, and several horticultural varieties. Although not currently present in Wisconsin, it is a severe threat to ash in the state. Ash compromises a significant component of the northern hardwood timber type and can be found in nearly pure stands in some low land areas. Adult beetles feed on foliage; however, it is the larvae that cause mortality by feeding on the phloem and outer sap wood of the Ash trees. Barron County will cooperate, as requested, with ongoing trapping and survey efforts. Sound silvicultural practices will continue to be used to maintain forest health. Should an infestation occur Barron County will work with the DNR Forest Health staff in applying any necessary measures to minimize the spread, including aggressive salvage of infested trees.

610.3.2 Funding

Desired control activities on the County Forest will be funded through the county forestry budget, if other sources of funding are not available. In the event costs require additional funding, special appropriations from the Counties General Fund will be sought. In addition, state legislation may provide monetary assistance in direct crisis situations where major control operations are undertaken. In case of gypsy moth outbreaks, the county may seek funding from the State of Wisconsin Gypsy Moth Suppression Program.

610.3.3 Legal Obligations

All control operations will comply with regulations as set forth in existing state and federal legislation. Refer to Wisconsin Administrative Code NR80, AG.29, and the Environmental Pesticide Control Act.

610.3.4 Special Projects

The County may cooperate with other agencies in forest pest research. See Chapter 200.

615 TIMBER THEFT

All cases of alleged timber theft on the County Forest shall be investigated and resolved promptly. An allegation of theft by cutting and/or removing timber from the County Forest does not alleviate the county from payment under s. 28.11 (9) Wis.Stats. The county will collect damages pursuant to s. 26.05 Wis. Stats. and may also pursue criminal charges under s. 943.20 Wis. Stats. and/or seek civil damages.

615.1 TIMBER THEFT INVESTIGATION

The following procedure should be used in all cases of alleged timber theft:

- (1) Determination of Theft:
 - (a) Gathering facts The County, through its sheriff's department and along with assistance of the DNR liaison, rangers and wardens, will ascertain the facts pertinent to the alleged theft, including determination of the damages to the County. Legal counsel representing the County should be involved in all aspects of investigation. Property involved in the alleged theft may be seized, pursuant to s. 26.04 Wis. Stats. for use as evidence.
 - (b) Boundary determination If property boundaries are involved, the County shall conduct a legal survey of the boundary in question.
 - (c) Negotiated resolution based on statutes.
 - (d) Referral to District Attorney's Office for prosecution.

620 ENCROACHMENTS

The County will actively investigate all suspected cases of encroachments on the County Forest. To insure the integrity and continuity of the County Forest land, all cases will be dealt with promptly and in a consistent manner. The following procedures will be used in all cases of suspected encroachments:

- (1) The County will establish property boundaries; if necessary, a legal survey will be conducted.
- (2) The County will gather all facts.
- (3) The Committee, in consultation with the Forest Administrator, county legal counsel, and the DNR, will make a decision as to the disposition of the case.
 - (a) All above ground encroachments that are movable will be removed from county property.
 - (b) Permanent type facilities, such as homes, garages, and septic systems shall be addressed individually and may be removed or handled by a land use agreement. Sale or transfer of the encroachment should remain an option depending on the circumstances involved and the viability of an adverse possession claim (s. 893.29 Wis. Stats.).
 - (c) Provisions in the land use agreement, if that option is pursued, may include granting the encroacher permission to encroach on the county Forest lands with the following stipulations: no other encroachments will be allowed; the permit is non-transferable; the county must be notified once encroachment is terminated; County continues full ownership and control of property; permittee agrees to waive any rights to any future declaration of ownership or interest in the encroached county property; county reserves the right to cancel the permit and the permit is to be filed in the office of the County Forestry Department and all fees related to the land use permit shall be paid by the permittee.